(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 21 December 2006 (21.12.2006)

(10) International Publication Number WO 2006/134689 A1

(51) International Patent Classification: H01L 21/285 (2006.01) H01L 33/00 (2006.01) H01S 5/042 (2006.01) H01L 29/45 (2006.01)

(21) International Application Number:

PCT/JP2006/303523

(22) International Filing Date:

21 February 2006 (21.02.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2005-172585

13 June 2005 (13.06.2005) ΤP

- (71) Applicant (for all designated States except US): KABUSHIKI KAISHA TOSHIBA [JP/JP]; 1-1, Shibaura 1-chome, Minato-ku, Tokyo, 1058001 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SAITO, Shinji. NUNOUE, Shinya. OKA, Toshiyuki.
- Agents: MIYOSHI, Hidekazu et al.; Toranomon Kotohira Tower, 2-8, Toranomon 1-chome, Minato-ku, Tokyo, 1050001 (JP).

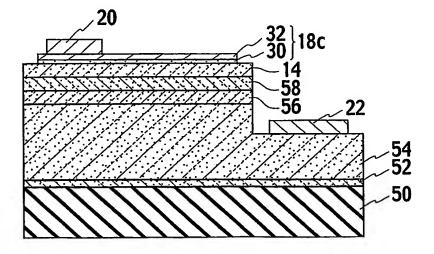
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SEMICONDUCTOR DEVICE, METHOD FOR FABRICATING AN ELECTRODE, AND METHOD FOR MANU-FACTURING A SEMICONDUCTOR DEVICE



(57) Abstract: A semiconductor device includes a p-type nitride semiconductor layer (14); and a p-side electrode (18) including a palladium oxide film (30) connected to a surface of the nitride semiconductor layer (14).

